### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection Bay Area Branch

690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 99.28

## WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-024139 Address: 333 Burma Road **Date Inspected:** 30-May-2011

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island **Location:** Shanghai, China

**CWI Name:** Mr. SHI LIE **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component: OBG** Segment

### **Summary of Items Observed:**

On this date CALTRANS OSM Quality Assurance (QA) Inspector Santhosh Ramakrishna Pillai was present during the times noted above for observations relative to fabrication work of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China.

This QA inspector randomly observed the following work:

### 1. INPROCESS:

Orthotropic Box Girder (OBG) at Trial Assembly Area:

ZPMC welding personnel performing Shielded Metal Arc Welding of Repair weld for the bottom plate to bottom plate transverse splice weld joint located on 13AE+13BE. The weld is designated as OBW13B-001, 002 & 003. The welder is identified as 067184 & 066416. ZPMC QC Mr. WANG ZHU was onsite monitoring the welding variables. The inprocess Shielded Metal Arc Welding appears to be progressing in compliance with WPS-345-SMAW-4G (4F)-FCM-Repair-1. The weld repair report number is named as CWR-2992.

ZPMC welding personnel performing Shielded Metal Arc Welding of built-up Repair weld for the longitudinal shear plate located on 13AE at cross beam side. The welder is identified as 040378. ZPMC QC Mr. WANG LI YANG was onsite monitoring the welding variables. The inprocess Shielded Metal Arc Welding appears to be

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progressing in compliance with WPS-345-SMAW-3G (3F)-FCM-Repair-1. The weld repair report number is named as WR-21058.

ZPMC welding personnel performing Shielded Metal Arc Welding of Repair weld for the side plate to side plate transverse splice weld joint located on 13AE+13BE at bike path side. The weld is designated as OBE13E-003. The welder is identified as 067184. ZPMC QC Mr. WANG ZHU was onsite monitoring the welding variables. The inprocess Shielded Metal Arc Welding appears to be progressing in compliance with WPS-345-SMAW-4G (4F)-FCM-Repair-1. The weld repair report number is named as WR-21112. Further weld detail mention in attached picture.

### 2. NDT:

Magnetic Particle Testing (MT):

MT carried out for the ZPMC submitted Notification No 09303, Item No: 4.

This QA Inspector performed Magnetic Particle Testing (MT) of approximately 15% of the area that has been previously tested and accepted by ZPMC MT technicians. This QA Inspector generated a TL-6028 MT report on this date. The members are identified as butt joint between deck plate to deck plate transverse splice weld joint located on 13AE+13BE. The weld designation numbers is as follows:

1. OBE13-002.

MT carried out for the ZPMC submitted Notification No 09303, Item No: 5.

This QA Inspector performed Magnetic Particle Testing (MT) of approximately 15% of the area that has been previously tested and accepted by ZPMC MT technicians. This QA Inspector generated a TL-6028 MT report on this date. The members are identified as butt joint between side plate to side plate transverse splice weld joint located on 13AE+13BE at cross beam side. The weld designation numbers is as follows:

- 1. OBE13D-003,
- 2. OBE13D-004.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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# **Summary of Conversations:**

No relevant conversations were reported on this date.

### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

<b>Inspected By:</b>	Pillai,Santosh	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer